Gene Expression Services

Genome Explorations provides Next Generation Sequencing, Genotyping Services, Clinical Molecular Diagnostics MDx, Gene Expression Analysis and miRNA Profiling services for Pharmaceutical, Biotech and Academic institutes worldwide in our State of the art CLIA Certified GLP laboratories. Our experienced scientists work one-on-one with Scientists, Researchers and Clinicians to provide a ‘Complete Solution’ for Genomic Services, from experimental design to in-depth data analysis and advanced bioinformatics. Genome Explorations also offers ‘Complete Solutions’ for challenging specimens, such as whole blood and FFPE tissues.

At Genome Explorations, we offer our employees competitive salary and benefits packages combined with a professional work environment which fosters excellence, integrity, and innovation.

Genome Explorations Inc. was founded by Dr. Divyen H. Patel to provide Academic, Biotech and Pharmaceutical institutes with a 'Complete Solution' for RNA, miRNA and DNA analysis. Genome explorations also provide all associated Bioinformatic solutions to make sence of the data generated through these high through put technologies. Dr. Patel started and managed the Genomics Core Facility at St. Jude Children's Research Hospital.

RNA, miRNA and DNA Extraction Services

What Genome Explorations Provides

Genome Explorations will extract RNA, miRNA, DNA, or all three at the same time from each sample provided. We have detailed and validated SOP’s that consistently result in high-quality, high-yield nucleic acids.

Gene Expression Services

Scientists at Genome Explorations have worked with over 250 scientists worldwide for their gene expression and/or genotyping needs. As an industry leader in the microarray field, we have developed a series of SOP’s that allow us to reproducibly generate data sets of the highest quality. Our validated protocols consistently result in sample-to-sample variability of less than 0.5% (industry standard is 2.0%).

Globin Reduction Protocols

Genome Explorations utilizes protocols by Affymetrix and PreAnalytiX for globin RNA reduction using four PNA oligomers. Sequences the four oligomers whose are complementary to the 3’ portions of the alpha and beta hemoglobin RNA transcripts. The PNA oligomers form stable duplex structures with the globin mRNA and block the progression of reverse transcriptase. Inhibition of the globin cDNA synthesis in turn, dramatically reduces the amount of cRNA corresponding to the hemoglobin transcripts.

Products

The 5500 SOLiD™ System* offers researchers high-quality sequencing data with the versatility to optimize runs for turn-around time or throughput. The 5500 SOLiD™ System is the next generation sequencer for every lab.

5500 SOLiD™ System

Benefits:

- Powerful bench top system Up to 15 Gb/day with 99.99% accuracy**
- Simplified sequencing Streamlined workflows and easy-to-use software
- Rapid run time Run a sample in as little as 24 hours
- Flexible Independent lanes enable multiple applications in a single run

Publications

CM156, a sigma receptor ligand, reverses cocaine-induced place conditioning and transcriptional responses in the brain. 2011
Xu YT, Robson MJ, Szeszel-Fedorowicz W, Patel D, Rooney R, McCurdy CR, Matsumoto RR.
Pharmacol Biochem Behav. 2011 Dec 30. [Epub ahead of print]

Panhistone deacetylase inhibitors inhibit proinflammatory signaling pathways to ameliorate interleukin-18-induced cardiac hypertrophy. 2011
Majumdar G, Rooney RJ, Johnson IM, Raghow R. Physiol Genomics 2011 Dec 16;43(24):1319-33.0

For more information please visit
http://www.genome-explorations.com